CUMSTON (C. G.)

THE TREATMENT OF INOPERABLE UTERINE CANCERS.

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The Treatment of Inoperable Uterine Cancer.

A CLINICAL LECTURE DELIVERED AT THE SUFFOLK DISPENSARY
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GENTLEMEN: — It has been my sad privilege to show you several patients suffering from malignant disease of the uterus, which had so far developed that a radical operation for their relief was out of the question.

You all know what excellent results are obtained by operation when the disease is seen early. Thanks to the French surgeons especially, vaginal hysterectomy has been made quite simple, and the results furnished by this radical operation are surely as good as can be desired under the circumstances.

Prof. Cushing of our Faculty has met with great success in uterine cancer, in which he performed this operation.

But all uterine cancers are not, unfortunately, in a condition that would justify a radical operation, and this is the case when the neoplasm has gone beyond the limits of the uterus. In order to attain any kind of a successful result, the entire neoplasm must be removed. When this is out of the question the only thing that remains for you to do is to give an anodyne treatment and consider the malignant growth as a *noli me tangere*.

But there are exceptions to what I have just said, and in a certain number of cases palliative surgical measures are clearly indicated. I now will give you the principal ones: Firstly, you should prevent the occurrence of hæmorrhages, which, as you know, are one of the first symptoms of the disease, and may become sufficiently serious to endanger the patient's life. Secondly, to diminish the hydrorrhœa, which often weakens the subject as much as the loss of blood. Thirdly, suppress the pain — not that produced by the invasion of the neoplasm and which is only controlled by morphine — but that resulting from retention and resorption of the hydrorrhœa. Fourthly, diminish to the greatest possible degree the autoinfection produced by the absorption of the putrid matters retained in the uterine cavity, and which certainly contribute largely in hastening cachexia. Fifthly, reëstablish the flow of urine when one or both ureters have been obliterated by the progress of the growth.

A special treatment corresponds to each one of these indications, or perhaps one treatment may be common to several of them taken together, and it is just these therapeutical measures that I wish to speak of. But, first of all, I will give a general idea of the signs on which you are to guide yourselves, in order to decide

the question as to whether a cancer of the uterus is inoperable or not; whether hysterectomy or amputation of the cervix should or should not be performed.

Now there are signs of value as to indications of operation. When you are in presence of a cancer of the cervix, and nine times out of ten this will be the case, you should examine the vaginal walls in order to ascertain if they have been invaded by the neoplasm. If you do not discover any interruption between the erosions on the cervix and the supposed invasion of the vaginal walls, the cancer has gone beyond the limits of the cervix; but, if there is an interruption, a line of healthy mucous membrane between the cervix and the indurated vaginal walls, you may perhaps only have to do with a vaginitis produced by the irritating discharges from the diseased cervix.

You must be especially careful to ascertain if the anterior wall has been invaded, because in Douglas' cul-de-sac you can, if necessary, remove part of the vaginal wall, while for the anterior wall this is impossible on account of its relation to the bladder.

The first contra-indication to a radical operation in cancer of the uterus is consequently when the growth has directly invaded the vaginal walls, especially the anterior.

The next thing to be looked for is the invasion of the broad ligaments by the disease. Here, too, there are some signs easily recognized, which will,if found,decide the question in the majority of cases. Recent occurrence of pain in the kidneys, extending down the buttocks on the anterior upper part of the thighs, is a sign that these ligaments are in all probability invaded.

If the uterus is bound down and the cervix immovable, if you find indurated lumps on the sides of the uterus, or simply a hard feel of the broad ligaments, all these signs indicate that there is present a cancerous infiltration of these parts.

Fochier of Lyons has particularly insisted on rectal examination in order to judge of the possibility of a radical operation of a uterine cancer. By systematically making this examination in every case where the patients showed no other sign of generalization of the disease, the above-mentioned surgeon was able to discover a little projection starting from the sides of the uterus and which followed the course of one or both ureters. It is clear that an operation for the entire ablation of the neoplasm would in this case result in wounding the ureters or else leave behind a portion of the growth.

You have still one other sign, which, when it is present, indicates that a radical operation is out of the question: namely, when the lymphatic glands are invaded.

The above are the chief signs on which you can base your treatment. Remember that there is always a possibility of a latent invasion of the lymphatics; but, when you make up your minds that a uterine cancer is in condition to be radically treated, operate completely and without losing time.

As I have shown you, there are

many conditions to treat in cases of inoperable cancer of the uterus, and the measures that have been proposed are as numerous. The most important of these is curettement, which has been put forward by many surgeons, and the results have been frequently really remarkable. This operation is often decidedly indicated.

To perform it, after all antiseptic precautions have been observed, you begin by removing the abundant granulations, which may be so greatly developed as to actually hide the orifice of the cervix, and even the cervix itself.

This you will do with a pair of long curved scissors. While cutting away these granulations you may cut through a vessel of some size, and considerable bleeding may ensue; but this is easily controlled by a tamponade or the application of the thermo-cautery.

When you have removed enough morbid tissue to be able to see the orifice of the cervix you should measure the depth of the uterine cavity with a sound. This simple manœuvre is frequently quite difficult to execute in a case of cancer, and it should always be done with great care, because the tissues of the uterus being soft from the invasion of the neoplasm, are easily perforated by the instrument.

If the internal orifice is blocked up a progressive dilatation should be practiced in a complete manner, so that curettement of the cavity can be easily accomplished; for it is most essential to be able to attain the fundus in order to remove the diseased tissues high up. Besides, a complete dilatation will allow you to make the necessary applications to the cavity as well as assuring a good drainage.

But let me impress upon you the fact that this dilatation may be the cause of accidents, such as the introduction of the sound into the peritoneal cavity, rectum or bladder, when these organs are invaded by the growth. It may also produce slight hæmorrhage by rupturing vessels in the cervix; but this is easily controlled.

When you have gained entrance to the cavity of the uterus you should endeavor to remove as much of the degenerated tissues as is possible, even if you are obliged to ligate the uterine arteries. You should continue your work until you find yourselves in the immediate neighborhood of the peritoneum, bladder and rectum. If, by opening the cul-de-sac of Douglas you can remove any unhealthy tissue, you must not hesitate to do so, after which a carefully applied suture will probably lead to a reunion by first intention.

As to the choice of a curette, Recamier's is the one to select, although a perforation will occur more easily with this than with Sims' instrument. When you curette for cancer, the object to be attained is the destruction and removal of all diseased tissue; but you must proceed with much more care than if you were curetting a mucosa for an endometritis.

After curettement the subject will be pretty sure to feel better; and cases are reported in which the growth remained stationary for a number of months. The hæmorrhages and hydrorrhœa often disap-

pear almost completely. When the symptoms, for which curettement was performed return, the operation should be repeated, only this time with still more prudence, because perforation is much more likely to occur.

Curettement will answer the therapeutic indications of many symptoms of uterine cancer. It will generally stop the hæmorrhages, which are the cause of the anemic condition of these unhappy patients; it will diminish the hydrorrhœa, which also weakens the subject, and is also a source of autoinfection, and by rendering the cervical canal patent, the purulent, ichorous discharges are drained away. You consequently can see how much good it can bring about.

There is, however, a contra-indication for curettement, and that is when the subject is extremely weak from loss of blood. When hæmorrhages occur early, appear often, and in great quantity, the disease takes on a peculiar aspect and progresses rapidly. In these patients the complexion has not the yellow tint of cancerous cachexia, but a pale anemic color; and they will complain of tinnitus aurium, syncope and short breath. Death is often the immediate result of the hæmorrhages.

The loss of blood renders the prognosis of the operative measures less good, and before undertaking surgical measures you should endeavor to reduce the hæmorrhages by suitable dressings and put off the operation until your patient has regained sufficient strength to undergo the shock.

Remember that curettement produces profuse hæmorrhage, and for this reason the operation must be performed rapidly. As soon as the healthy tissues are reached this hæmorrhage will stop. This is especially true of the so-called fungus cancer of the cervix.

We now come to the treatment of uterine cancer by cauterization. The galvanic loop, or Paquelin's thermocautery, are the instruments employed; but the ordinary cautery has the advantage of giving off greater heat, which penetrates into the depth of the tissues. This therapeutic measure is especially indicated in the two following symptoms: Firstly, to stop a severe hæmorrhage when a tamponade is out of the question, being impossible, difficult, or when it does not appear to be sufficient; and, secondly, when for some reason curettement is impossible, or must be postponed on account of the patient's condition.

But generally cauterization is only a part of the operation of curettement, which, when completed, should be followed by cauterization of the tissues, avoiding with care the various important organs in the neighborhood. You must also avoid scorching the vaginal walls by introducing wet gauze, so as to line the canal. The cautery points to be selected vary with each case, although I prefer the blade-shaped end of the Paquelin for general work, as I have found it far more easily handled.

When you cauterize the tissues after scraping with the sharp curette, they will quickly stop bleeding, and the eschar soon comes away, leaving a red and healthy looking surface. Cases of rectal or vesical fistula

have been reported due to the detachment of an eschar, and I mention this so that you will be prudent.

Other caustics besides the cautery may be employed. The chloride of zinc is of all the chemical caustics the best for application in uterine cancer, because its action is not only destructive, but produces sclerosis of the tissue acted upon as well; and when we consider that it is a powerful antiseptic and hæmostatic, you see that it leaves little to be desired.

It is best employed in a strong solution, say from 40 to 50 per cent., and is applied to the cavity by means of tampons wrung out in the solution. You would do well to use the kite-tail system of tampons, as this will greatly facilitate their removal. If the cavity of the uterus is rather small an intra-uterine crayon of chloride of zinc, varying in strength according to the amount of action desired, may be introduced. If you employ tampons they should be removed in six hours after their introduction; with the crayon, you simply leave it to melt; and as this is a slow process the tissues imbibe it as fast as it becomes liquid.

I believe that it is bad practice to attack an inoperable epithelioma of the cervix by anything other than scissors and thermo-cautery, and would advise you never to employ chemical caustics here, not only on account of the risk of their action on the vaginal walls, but especially because it is almost impossible to obtain a direct action on the cervix.

Lactic acid, the tincture of chloride of iron, especially the latter, have been used, but their use is seldom indicated, and I only mention them in order to show you their comparative uselessness in these cases.

The next question to be considered in treatment of this terrible malady is that of injecting organic or mineral substances directly into the parenchyma of the growth.

Dr. Fafius of Moscow has treated seven cases of cancer of the uterus by intra-parenchymatous injection of a six per cent. solution of salicylic acid prepared with a 60° alcohol. The vagina is irrigated daily with some antiseptic solution for several days preceding the injections, which are preformed as follows: After the cervix has been brought fully into sight, a quantity of from one to four cubic centimetres of the above solution is injected into five or six places in the cancerous mass. An ordinary hypodermic syringe is employed by Fafius, but for this as well as for the other injections of which I am about to speak, I employ Behring's syringe, which holds ten centimetres cube of liquid, which prevents the necessity of being obliged to be continually refilling the syringe, and still more important is that it is an aseptic instrument.

The needle should be pushed into the tissues about a centimetre. The first injection may cause quite an abundant bleeding, but this becomes less and less as the injections are repeated. After each séance, the parts are powdered with iodoform, and the vagina plugged with two or three iodoform glycerine tampons and the patient kept in bed for the remainder of the day.

The salicylic acid injections are

rather painful, but the pain is of short duration. The results of the treatment has been so far quite good, but many more cases must undergo this test before its actual value can be determined.

Professor Vulliet of Geneva and Professor Houffer of Budapesth have recently experimented with intra-parenchymatous injections of pure alcohol in uterine cancer, and I myself have been trying it in a case in which the disease was too far advanced to operate on.

The injections are made in the same manner as in the case of the salicylic acid solution, only instead of a centimetre cube, a few drops, say three or four, are injected in eight or or ten different places in the mass, always beginning at the centre and going towards the periphery until healthy tissue is reached, at least the supposed health tissue. If bleeding occurs from the penetration of the needle, you must wait until this has ceased, without withdrawing it, as your alcohol will run out with the blood and will have no action on the tissue.

Houffer uses as much as five grammes of alcohol at each séance, but in my case I followed Vulliet's instructions, and only injected a few drops in each place. If you inject a gramme or so at each insertion of the needle, much of the alcohol will run out and its action is lost, consequently I would advise you to employ the injections of alcohol as I have described according to Vulliet.

The pain produced by the injection of alcohol is not severe and is of short duration. The injections may be given every day for a week or so, and then you will decrease to twice a week, once a week, etc.

The results by this treatment are most encouraging. My case is rapidly improving locally and her general condition is better. However, it is now *sub judice*, and its real value cannot as yet be estimated. Let me add that phosphated oil (Nepveu) and picric acid (Moran) have also been injected on account of their toxic effects on the cells.

I now wish to say a few words regarding the dressing of cancer of the uterus. When the growth cannot be removed by operation, and when there are no complications demanding urgent treatment, I think with Verchère that a careful antisepsis of the parts is one of the most useful and rational treatments when combined with curettement. When well carried out the terrible fœtidity is ameliorated and auto-infection of the patient from the stagnant discharges in the vagina is obviated.

As to the choice of the antiseptic to be employed, it matters little, although those having the least toxicity and the greatest deordorizing power are to be especially preferred. Sulphonaphthol, eucaline or creoline are perhaps the best, and should be employed at the strength of a one per cent. solution.

I have had considerable experience with terebene, and, although I cannot give any explanation as to its manner of action, I can say that it has a most excellent and really wonderful effect on cancerous growth of the uterus. A daily dressing of tampons wrung out with this liquid will

cause healthy granulations to spring up, the hæmorrhages disappear, and the fœtidity as well.

To describe the entire treatment of the disease, when it has produced trouble in the neighboring organs from its invasion, would form a small volume, and in closing this lecture I will be brief on this point. The pains may either be from rectal or renal cause.

The fœcal matter accumulates in the sigmoid flexure, which will be easily discovered by palpation. Besides, the patient will complain of colic, abdominal pain, and tympanism will be present. You may have rectal tenismus, mucous discharges from the rectum, sometimes even mixed with blood, without the existance of a rectal perforation.

In these cases, very often repeated rectal irrigations by means of a soft rubber rectal tube, combined with the exhibition of laxatives, such as cascara sagrada, etc., should be employed, in order to prevent or overcome retention of the feces.

If their expulsion should become impossible, or if a perforation of the rectum occurs, an artificial anus should be made.

Vesical and renal pains are frequent, and are of grave significance, because they indicate a compression of the ureters against the cervix by the increasing growth of the neoplasm. The compression produces a dilatation of the ureter and a ureteritis, with a resulting interstitial nephritis, from retention of urine.

When the ureter is obstructed, nephrectomy or nephrotomy are naturally out of the question on account of their gravity, but perhaps in some few cases a uretero-rectal or vaginal fistula might be made, which would assure the flow of the urine.

Such, gentlemen, is a short *résumé* of the line of treatment to be carried out in case of inoperable cancer of the uterus.